IN THE CLAIMS:

For the convenience of the Examiner, all claims being examined, whether or not amended, are presented below.

Please cancel, without prejudice, claims 1, 3, 5, 6, 18-21, 23, 25, 39, 40, 42, 43, 44, 46, 47, and 49.

1-3. **(Cancel)**

4. **(Currently amended)** A method for the treatment of cerebral ischemia which comprises systemically administering to a patient in need thereof a *hedgehog* polypeptide in an amount effective to reduce cerebral ischemia, wherein said *hedgehog* polypeptide comprises an amino acid sequence that (a) binds to a naturally occurring *patched* receptor and promotes *hedgehog* signal transduction, and (b) is encodable by a nucleic acid ~~that hybridizes under stringent conditions, including a wash step of 0.2 x SSC at 65 °C, to a nucleic acid~~ sequence designated in ~~at least one of SEQ ID NO: 1,~~ SEQ ID NO: 4, ~~SEQ ID NO: 5, or~~ SEQ ID NO: 6, or an N-terminal auto-proteolytic fragment thereof.

5-21. **(Cancel)**

22. **(Currently amended)** The method of claim 4 ~~any of claims 3-6~~, wherein the patient is treated prophylactically.

23-25. **(Cancel)**

26. **(Currently amended)** The method of claim 4 ~~any of claims 3-6~~, further comprising administering one or more of an anticoagulant, an antiplatelet agent, a thrombin inhibitor, and/or a thrombolytic agent.

27. **(Currently amended)** The method of claim 4 ~~any of claims 3-6~~, further comprising performing vascular surgery.

28. (**Original**) The method of claim 27, wherein the vascular surgery comprises carotid endarterectomy.

29-40. (**Cancel**)

41. (**Currently amended**) A method for the treatment of cerebral ischemia which comprises systemically administering to a patient in need thereof a *hedgehog* polypeptide in an amount effective to reduce cerebral ischemia, wherein said *hedgehog* polypeptide comprises an amino acid sequence that (a) binds to a naturally occurring *patched* receptor and promotes *hedgehog* signal transduction, and (b) is ~~at least 80%~~ identical to ~~at least one of SEQ ID NO: 10,~~ SEQ ID NO: 13, ~~SEQ ID NO: 14,~~ SEQ ID NO: 15, or an N-terminal auto-proteolytic ~~a bioactive~~ fragment ~~of at least 50 contiguous amino acids~~ thereof.

42-44. (**Cancel**)

45. (**Currently amended**) A method for the treatment of cerebral ischemia which comprises systemically administering to a patient in need thereof a *hedgehog* polypeptide and at least one additional agent, in an amount effective to reduce cerebral ischemia, wherein said *hedgehog* polypeptide comprises an amino acid sequence that (a) binds to a naturally occurring *patched* receptor and promotes *hedgehog* signal transduction, and (b) is identical to ~~encodable by a nucleic acid that hybridizes under stringent conditions, including a wash step of 0.2 x SSC at 65 °C, to a nucleic acid sequence designated in at least one of SEQ ID NO: 1,~~ SEQ ID NO: 134, ~~SEQ ID NO: 5, or~~ SEQ ID NO: 156, or an N-terminal auto-proteolytic fragment thereof, and wherein said additional agent is selected from at least one of an anticoagulant, an antiplatlet agent, a thrombin inhibitor, or a thrombolytic agent.

46-47. (**Cancel**)

48. (**Currently amended**) A method for the treatment of cerebral ischemia which comprises systemically administering to a patient in need thereof a *hedgehog* polypeptide in an amount effective to reduce cerebral ischemia, wherein said *hedgehog* polypeptide comprises an amino acid sequence that (a) binds to a naturally occurring *patched* receptor and promotes *hedgehog*

signal transduction, and (b) is identical to ~~encodable by a nucleic acid that hybridizes under stringent conditions, including a wash step of 0.2 x SSC at 65 °C, to a nucleic acid sequence designated in at least one of SEQ ID NO: 1,~~ SEQ ID NO: 134, ~~SEQ ID NO: 5, or~~ SEQ ID NO: 156, or an N-terminal auto-proteolytic fragment thereof, and wherein said method additionally includes surgery.

49. **(Cancel)**